### NATIONAL WEATHER SERVICE - MEDFORD, OREGON

Spring 2011 Volume 1, Issue 4



### Observer Honored with John Campanius Holm Award

By Ryan Sandler, Warning Coordination Meteorologist

The exceptional achievements of volunteer cooperative observer Frank Christina were recognized by representatives from the Medford National Weather Service Office, the California-Nevada River Forecast Center, and the California Department of Water Resources on January 19, 2011. The ceremony took place at his home, also the site of his Mount Shasta City weather station. The various pieces of equipment that make up his weather station are seen in the background of the picture to the right.

Mr. Christina was presented with a 25-year service award and the prestigious John Campanius Holm award from the Medford National Weather Service Office. Only 25 out of more than 10,000 cooperative observers receive the John Campanius Holm award each year. This award honors outstanding accomplishments in the field of meteorological observations.

The Mount Shasta community relies upon his information through the local newspaper, and he is considered a climate expert for his area. In January 2010, a major snowstorm

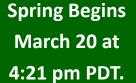


NWS Medford Meteorologist-In-Charge John Lovegrove presents the John Campanius Holm award to Frank Christina of Mount Shasta City, California.

dumped nearly 40 inches of heavy wet snow in three days, which brought down trees and power lines and crushed roofs. His daily observations helped the county receive assistance as part of a federal disaster declaration. Mr. Christina shows great pride in his work, which is a model of excellence.

Mr. Christina also received letters of appreciation from the California Department of Water Resources and the California-Nevada River Forecast Center. Mr. Christina has proven his

dedication through accurate, consistent, and reliable observations over the years. The letter from the California Department of Water Resources stated, "During the period that Mr. Christina has collected the weather observations in Mount Shasta City, the State has experienced floods, droughts, heavy snow, and blistering heat, Throughout, Mr. Christina has maintained a reliable daily weather observation record annotated with valuable climatological comparisons."



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## From the Desk of the Meteorologist-In-Charge

#### By John Lovegrove

Now that the weather is warming and the days are getting longer, we all begin to think about spring. With spring comes the threat of frost and freeze for orchards, vineyards, and gardens. Several decision support tools are available on the NWS Medford website for gardeners and growers to use to help them cope with the everchanging weather of southern Oregon and northern California.

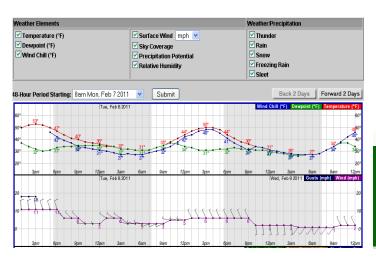
One tool is the Activity Planner. It can be found on the NWS Medford webpage and is listed on the blue menu to the left immediately under the Forecasts heading. The planner can tell you if the forecasted temperature (or humidity, wind, or other parameter) falls within a range you set for a location you select. This can help you see when forecasted temperatures fall below 36 degrees, for frost to form, or 32 degrees, for a freeze to occur, and the duration of those temperatures each morning.



Saturday, February 12 at 6pm Temperature: 49 °F

Element		Min		Max
Temperature (°F)	~	32	to	36
Relative Humidity	~		to	
Surface Wind Speed (mph)	~		to	

The red bars in the example above show when temperatures are forecasted to drop between 32 and 36 degrees in Medford during several dates in February. There is a link to the lower right of the bar graph that calls up what is known as a meteogram (below).



This plots several hourly weather parameters on a graph, such as temperatures, dew point, wind chill, wind, and wind gust. With the meteogram, you can see the daily fluctuations in temperature and how low the temperature will go at night, including the hour it is forecast to occur.

There is one more way to see detailed weather information. If you click on either the activity planner bar chart or the meteogram, you will get a tabular forecast for the location you selected. This is similar to a meteogram but breaks down the hourly weather information into a text format.

Date	02/07									
Hour (PST)	13	14	15	16	17	18	19	20	21	22
Temperature (°F)	50	52	53	52	50	47	44	41	40	38
Dewpoint (°F)	37	34	32	30	31	33	34	34	35	35
Wind Chill (°F)	50				46	42	39	37	34	33
Wind (mph)	11	11	11	11	11	11	6	6	6	3
Wind Dir	N	N	N	NNW	NNW	NNW	NW	NW	NW	W
Gust	18	18	18							
Sky Cover (%)	58	58	58	65	65	65	65	65	65	66
Popn. Potential (%)	21	21	21	21	21	21	21	21	21	12
Rel. Humidity (%)	60	51	45	43	49	58	68	76	83	88
Thunder										
Rain				SCho	SCho	SCho	SCho	SCho	SCho	
Snow										
Freezing Rain										
Sleet										

Some of these charts are too small to read here in detail, but it gives you an example of what is available. I ask you to give them a try on your own. Don't hesitate to ask us about them, either via e-mail or phone, if you have questions. We are **your** National Weather Service and are here to help.

Our goal is to help you make the decisions you need to protect your gardens or crops. Please remember when using any of these highly detailed tools, the forecast is the average for a 2.5 km by 2.5 km square. There will undoubtedly be variations within that square – either higher or lower. The forecast will be close, but it is technically impossible for the NWS to forecast for every square foot of ground.

Daylight Savings Time Began March 13!
Clocks Should Now Be Ahead 1 Hour.

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### Tsunami Waves from Japan Strike West Coast

Late in the evening on Thursday, March 10 (Pacific Standard Time), a 9.0-magnitude earthquake rocked Japan and sent tsunami waves radiating across the Pacific Ocean. The initial waves reached the coasts of Oregon and Northern California between 7 and 8 a.m. PST Friday, March 11, and continued throughout the day and into the evening before finally subsiding. Because the earthquake and resulting tsunami occurred only a few days before this newsletter was published, damage assessments and reports from the coasts are still being reviewed and compiled. We have gathered several pic-

IN CASE OF EARTHQUAKE, GO TO HIGH GROUND OR INLAND

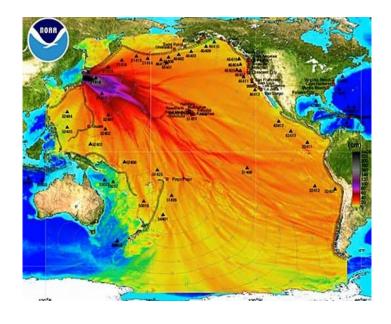
tures of the damage from the harbor at Crescent City, CA, just south of NWS Medford's coverage area. The harbor at Brookings, OR, which is located in NWS Medford's coverage area, also sustained similar damage. Appreciation is extended to Roger Williams, past Meteorologist-In-Charge of the Medford office, for these damage pictures. The lower picture, courtesy of NOAA, illustrates the wave heights of the tsunami across the Pacific Ocean as measured from satellite.

If you have pictures or video related to the tsunami waves and the damage caused by them, please email Warning Coordination Meteorologist Ryan Sandler at

Ryan.Sandler@noaa.gov.







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### A Centennial of Weather History in Medford

By Ryan Sandler, Warning Coordination Meteorologist

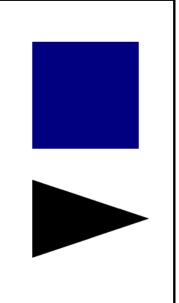
On March 11, 2011, we recognized 100 years of official weather reporting in Medford. The first official weather observer was Professor P.J. O'Gara. The station was located in downtown Medford on the top floor of a hardware building. On the roof of this building were self-registering thermometers, a rain gauge, and wind equipment. Professor O'Gara recorded daily weather observations of high and low temperatures, rainfall, prevailing wind direction, sky cover, and any noteworthy remarks such as thunderstorms. We have kept these historical original handwritten records at our office, although the paper is quite "weathered". March 11-31,

1911, was mild and dry with many days reaching the 70s and even 80s, along with only 0.03 inches of rain.

In 1911, a weather flag was flown each day on a nearby flagpole which was visible all over town. A six-feet square white flag indicated fair or clear weather; a square blue flag indicated rain or snow; and a square white and blue flag indicated local rain or showers will occur but not be general. A black triangular flag indicated temperature and was used in combination with the other square flags to show warmer temperatures if placed above and colder temperatures if placed below. An example of the flags flown is

shown to the right. A daily weather chart was also posted on the first floor window so as to be visible from the street.

Other than weather flags and a posted chart on a window, the only means of communicating the weather was by telephone and telegraph in 1911. Compare those communication methods to ours in the 21st century. We have radio, television, internet, satellite, and wireless devices to receive weather information. With all of these amazing technologies, it's still nice to know that some people like to receive their weather by phone. In 2010, we averaged 400 calls a day on the office's phone recording.



This flag combination indicated rain or snow and colder temperatures.

## Spring Brings Saturn & Its Moons Into Focus

After a slow March, the space weather activity begins to pick up in April with Saturn in opposition. This means the ringed planet will make its closet approach to Earth on April 3. In addition, its face will be fully the best time to view and photograph Saturn and its moons with a telescope. Currently, NASA's orbiter Cassini is beaming back images of Saturn's moons.

Later in April, the Lyrids Meteor Shower occurs from the 21st-22nd. Although considered an average shower, the meteors can produce bright dust trails for several seconds before fading.

Twenty meteors per hour can be seen at its peak during those two days, although it is possible to see a meteor at any time from April 16-25. Glare from a nearly full moon, however, will hide faint meteors. Those that can be illuminated by the Sun, making it seen will appear to be originating from the constellation Lyra, and the best viewing time will be after midnight far from any light pollution.

> May gets underway with the Eta Aquarids Meteor Shower. This is considered a light meteor shower and can produce up to 10 meteors per hour at its peak, which occurs from May 5-6. It is possible to see meteors during



© NASA / JPL / Space Science Institute, 2004

the early mornings of May 4-7, however. Viewing of this meteor shower will be aided by a thin moon setting early in the evening, allowing for a very dark

sky away from city lights. Look to the east after midnight, as meteors will appear to be radiating from the constellation Aquarius.

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### Climbing Mount Shasta? Refer to the REC!

Spring brings changeable weather across Northern California and Southern Oregon. The warmer temperatures and diminishing snowpack invite hikers and backpackers back into the mountains as any cabin fever from winter begins to fade. At the same time, snow can occur well into the spring and perhaps even into the early summer over the highest terrain. This means the snow shoes and skis can still be put to use in spring snow conditions.

Many adventurous climbers often eye Mount Shasta for climbing in the spring as the pounding winter storms begin to ease. Don't be lured into a false sense of security! At over 14,000 feet, a walk in the woods on the mountain can quickly turn into a test of survival if the weather forecast is neglected during planning.

NWS Medford issues a Recreational Report daily during the early mornings, which can be updated throughout the day if needed. This report focuses on the expected weather conditions on Mount Shasta for the next seven days. The report also contains information on snow levels for the next three days and highlights the forecasted temperature, wind direction, and wind speed at three elevations on the mountain (6000, 10,000, and 14,000 feet) for the current day. A clear, calm, and sunny day for the valleys can mean little on the mountain if clouds shroud the top and strong winds rip overhead.

The Recreational Report can be accessed from the NWS Med-

FORECAST FOR MOUNT SHASTA RECREATIONAL AREA NATIONAL WEATHER SERVICE MEDFORD, OR 302 AM PST FRI FEB 25 2011

CAZ082-260215-SOUTH CENTRAL SISKIYOU COUNTY-302 AM PST FRI FEB 25 2011

...WINTER WEATHER ADVISORY IN EFFECT UNTIL 4 PM PST THIS AFTERNOON...

.TODAY...WIDESPREAD SNOW SHOWERS. SNOW ACCUMULATION AROUND 2 INCHES. HIGHS IN THE LOWER TO MID 20S. NORTH WINDS 5 TO 10 MPH. CHANCE OF SNOW 80 PERCENT.

.TONIGHT...MOSTLY CLOUDY. SCATTERED SNOW SHOWERS IN THE EVENING...
THEN ISOLATED SNOW SHOWERS AFTER MIDNIGHT. LOWS ZERO TO 5 ABOVE.
NORTH WINDS 10 TO 15 MPH. CHANCE OF SNOW 30 PERCENT. WIND CHILL
READINGS 3 BELOW TO 13 BELOW ZERO.

.SATURDAY...PARTLY CLOUDY. HIGHS IN THE LOWER TO MID 20S. NORTH WINDS 10 TO 15 MPH. LOWEST WIND CHILL READINGS AROUND 14 BELOW IN THE MORNING.

- .SATURDAY NIGHT...PARTLY CLOUDY. LOWS 10 TO 15.
- .SUNDAY...MOSTLY CLOUDY. HIGHS IN THE LOWER TO MID 30S.

.EXTENDED ...

- .MONDAY...MOSTLY CLOUDY. SLIGHT CHANCE OF SNOW. LOWS IN THE 20S. HIGHS IN THE 30S.
- .TUESDAY...BREEZY. MOSTLY CLOUDY. CHANCE OF SNOW...THEN SNOW LIKELY IN THE AFTERNOON AND EVENING. LOWS IN THE 20S. HIGHS IN THE 30S.
- .WEDNESDAY...BREEZY. SNOW LIKELY. LOWS IN THE 20S. HIGHS IN THE
- .THURSDAY...SNOW SHOWERS LIKELY. LOWS IN THE 20S. HIGHS 35 TO 45.

GG
TODAY TEMPERATURE / WIND (MPH)
6000 FEET 23 / N 10
10000 FEET 4 / N 10
14000 FEET -16 / SW 25

SNOW LEVEL FORECAST

TODAY..... BASE
TONIGHT..... BASE
SATURDAY..... BASE
SATURDAY NIGHT... BASE
SUNDAY..... BASE

ford website at http:// www.weather.gov/medford. From the menu on the left, click on Forecasts under the yellow Forecasts heading. Click on the Mt. Shasta Recreational Forecast, which is the third link below the map. If you do not have access to a computer, you can visit the Mount Shasta Ranger Station in Mount Shasta City to view a printed copy of the most recent edition. Most outdoor supply stores in Mount Shasta City also post a hard copy of the forecast each day.

Regardless of a hiker's experience on Mount Shasta, the Recreational Report is an invaluable piece of information in planning for each trek up the mountain, regardless of the time of year.

Should more information be required or clarified, please contact NWS Medford by phone, and a forecaster would be happy to help. Even if only a day trip is planned for several miles through the woods, don't be caught unprepared by the weather! Get into the habit of always checking the REC forecast when venturing to Shasta.

# NATIONAL WEATHER SERVICE - MEDFORD, OREGON





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### Visit Our Website!

http://www.weather.gov/medford

#### **Our Vision**

Professionals focusing on science, teamwork, and customer service to design and deliver the best decision-support information to our community.

#### **Our Mission**

Our team at the National Weather Service Office in Medford strives to deliver the best observational, forecast, and warning information through exceptional customer service, extensive training and education, maintaining quality electronic systems, and relying upon an outstanding team of weather spotters and cooperative observers. We do this within the overall mission of the NWS:

To provide weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

#### **Our Values**

Trust, Integrity, Professionalism, Service, Teamwork, Ingenuity, Expertise, and Enthusiasm.

#### **About Us**

The Weather Forecast Office in Medford, Oregon, is one of more than 120 field offices of the National Weather Service, an agency under the National Oceanic and Atmospheric Administration and the United States Department of Commerce. The Weather Forecast Office in Medford serves 7 counties in southwestern Oregon and 2 counties in northern California, providing weather and water information to more than a half-million citizens. We are also responsible for the coastal waters of the Pacific Ocean from Florence, Oregon, to Point St. George, California, extending 60 miles offshore. The office is staffed 24 hours a day, 7 days a week, and 365 days a year by a team of 26 meteorologists, hydrologists, electronic technicians, hydro-meteorological technicians, and administrative assistants, under the direction of Meteorologist-In-Charge John Lovegrove.

